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I.

NEW INTESTINAL WORM.

At the sitting of the Academy of Sciences, of the 11th of October, M. G. Cuvier read a paper on the new kind of Intestina, or parasite worm. In introducing the subject, the celebrated naturalist observed that among the intestinal, or parasite worms, a certain number have, on the under side, or at the hinder extremity of the body, several organs in the form of air-holes, more or less like those which are observable on the arms of a polypus, or at the lower extremity of the body of a leech. From the number of these organs, some naturalists have derived the names given to the animals which possess them ; but, taking these holes for mouths, they have composed such names of the number, and of the word *stoma*, calling them respectively distoma, hexastoma, polystoma. M. Cuvier himself having seven and twenty years ago discovered, in the Mediterranean, a species of this family having three holes, conformed to the custom already established, and called it "Tristoma." It is now, however, well ascertained, that these organs do not serve to suck up nouriture any more than the organs of the same form possessed by the polypus and leech ; the animal only makes use of them to fix itself, and it is not difficult, with a little attention, to find the real mouth, which is single, and very different from the other apertures.

M. Cuvier allowed, therefore, that the terms dystoma, tristoma, &c., are, in fact, inappropriate ; and said that nothing but the inconvenience which the study of natural history is subjected to by the change of names, reconciles him to adopt them in preference to those of hexacotyles, &c., proposed by M. Blainville, and which express with more exactness the particular organization which they are intended to signify. However that might be, the animal presented to the Academy, said M. Cuvier, belonged to the genus of which he had just spoken, but it was infinitely more polystomatic, or more polycotylous, than any which had been ever before described. It was, besides, he said, the giant of Polycotyles. The greater number of these animals are little ; many are microscopic ; the species of which he presented one was four, five or six inches long. It had more than a hundred apertures, and if, in giving it a name, the analogy of the species most approaching to it in character were to be observed, it ought to be called hecatostoma, or hecatoncotyle.

In addition to the singularity of its organization, is that of the situation which it chooses, or rather which nature has assigned it, for its residence. It lives in the abdominal cavity, or even in the solid flesh of the polypus, of the only being which surpasses it in the number of holes with which it is furnished. The worm so existing as a parasite to the polypus, resembles in such a degree an arm of the polypus as to be completely deceptive. Of the two polypi to which the attention of the Paris Academy was called, one of them had the *hecatoncotyle* attached to one of its arms, which it almost devoured, and which it so effectually appeared to replace, that at the first glance it would be taken for that arm itself. M. Cuvier stated that naturalists owe the discovery of this worm to the minute observations of M. Laurillard, keeper of the cabinet of anatomy, in the Museum of Natural History, who, having been sent to Nice to make collections of fish of the Mediterranean, had applied himself at the same time to observe and collect the other productions of that sea, so rich in curiosities, and yet so little known. He found this kind of worm in the sort of polypus called, by Lamarke, *poulpe granuleux*, but had not been able to discover it in the common polypus, or any other of the family. Of the five individuals of the species of the hecatoncotyle which had fallen into the hands of M. Laurillard, three were found in the same polypus, the head sticking to some point of the inside, and the tail parts extending into the abdominal cavity. A fourth was found in another polypus, but in a position similar to that of the former three. The fifth, as it has been before observed, was attached to an arm of the polypus, which it had converted into a sort of bag, into which it had thrust its head, the rest of the body remaining at liberty and without. M. Cuvier concluded that the hecatoncotyle was, properly speaking, only a semi-intestinal, or rather semi-exterior parasite. It is detached with ease from the animal on which it lives, and on that being done, it takes to swimming, if it be in water, whether salt or fresh : if otherwise, it climbs any solid substance, without appearing to suffer much by this change in its situation ; it attaches itself firmly, by means of its suckers, to the fingers or any other body.

In giving the anatomical description of the animal, M. Cuvier represented its form to be lengthy and somewhat prismatic, the upper side being round, and the under side flat. Its usual length is four or five inches. It is broader and especially deeper towards the head than towards the other extremity : at the former the width is between four and five lines, and the depth six or seven. These dimensions gradually diminishing, are reduced at the tail to less than a line in width, and about two lines in depth. The holes are situated on the upper side, and amount to fifty-two pair. M. Cuvier, after entering into other anatomical details, added to his description of this extraordinary animal the expression of a hope, that now that the attention of naturalists had been called to it, the inquiries of persons whose local circumstances afforded the opportunity of making the necessary examinations, would lead to a perfect knowledge of its nature and history.—*Le Globe*.

II.

NEW ORGANIC ALKALIES DISCOVERED IN CINCHONA BARK.

We derive the following interesting article from the Journal des Progres, Vol. III., for 1829. Dr. Serturner, chemist of Hamelm, remarked, during the prevalence of an epidemic intermittent fever in 1828, that the quinia was far from being a certain specific against this disease, even when given in doses of six or eight grains, conjoined with acids. It stopped the paroxysm, but not in a permanent manner; for there were many relapses, which made it necessary to resort to the bark in substance, which, administered in large doses, in conjunction with acids, rendered the relapses much less frequent. Dr. Serturner likewise ascertained, what has been observed by other practitioners, that quinia cannot be substituted för cinchona, as a tonic. He was therefore induced to undertake new analytical researches on the different kinds of cinchona bark, with the view of ascertaining the cause of this difference. The details of his experiments he reserves for future publication, communicating at present his principal results, which are as follows:—

The precipitates obtained by treating the acidulous extracts of cinchona bark by alkalies, comprise, besides quinia and cinchona, certain additional organic alkalies, which may be considered as modifications of the former.

These new organic alkalies, and especially the principal one, which Dr. S. calls chinioidia (*chinioidine*), are intimately united with a subacid resinous substance, which, if not hurtful, is at least not beneficial, and which is very difficult to separate. Its separation can be effected completely, only by the vegeto-animal charcoal, which is obtained in the preparation of safranic acid, discovered by M. Liebig. After having dissolved in strong sulphuric acid (diluted with three or four times its weight of water) the impure alkaline substance, which remains after the sulphate of quinia has been separated by crystallization, the solution is to be decolorized by means of a mixture of the vegeto-animal charcoal above mentioned, with ordinary animal charcoal. But, before conducting this decoloration, it is best to treat the solution with alcohol, in order to separate the earthy salts.

The new alkali exists in the cinchona barks, associated with quinia and cinchona.

Properties of Chinioidia.—It resembles the other alkalies of the cinchona bark, in its insolubility in water, its color and taste. But it is distinguished from them by its activity, and its greater capacity of saturation. Its alkaline reaction, and its intimate combination with an extractive matter, which is probably an acid, are characters not less striking. Its salts, when freed from extractive, are affected by heat and liquids, after the manner of balsams; being viscid and fusible like the latter, although they contain frequently, to all appearance, their acids in a dry state. As a medicine, chinioidia is one of the most precious agents of the materia medica. It is not merely a better febrifuge than quinia, and even than the bark in substance, but it possesses many other therapeutic properties, which, admitting that they exist in the bark itself, are not to be found in quinia.

It was prescribed by Serturner [in saline combination?] in the dose of two grains three times a day, with the direction to swallow a little vinegar after each dose, with the view of saturating the gastric juice, which is sometimes alkaline in fevers, and which, by acting on the salt, sets free the chinioidia, and thereby renders the medicine inert, in consequence of the insolubility of the new alkali when uncombined. In all the cases treated by the new remedy, the fever was cut short without relapse; and in every instance the concomitant symptoms, such as the paleness of face, loss of appetite, œdema of the legs, &c., disappeared in a shorter time than is usually the case. The medicine failed only in a single instance. The quantity necessary to effect a cure was generally from twelve to twenty-four grains.—*N. A. Med. & Sur. J.*

III.

OBSERVATIONS ON THE COAGULATION OF THE BLOOD.

By John Bostock, M.D.

Sir,—I have stated in my physiology, when treating of the crassamentum of the blood, that the coagulation of this substance may be prevented by strong agitation.* I was induced to make this statement, partly because it coincided with the opinion generally entertained, and partly because I conceived that I had not unfrequently myself witnessed the fact, although I had never made this point the direct object of experiment. During the course of the last winter, my attention was more particularly directed to it, in consequence of an attempt which I made to ascertain the exact amount of fibrin in healthy blood, for the purpose of comparing it with the amount of fibrin in blood that exhibited the buffy coat. I shall not detail the various means that were employed, as they were none of them altogether satisfactory. But I was enabled to draw two conclusions from my experiments,—first, that the quantity of fibrin in healthy blood is much less than is generally supposed to be the case; and secondly, that its proportion is extremely variable in different specimens of what may be regarded as healthy blood.

My inquiries on this subject were still in progress when the last number of your Journal came into my hands, containing the observations of Dr. Davy, in which he notices the error that I had committed, and relates the results of various experiments that he had performed on the blood. From this paper, it appears that we had, to a certain extent, been pursuing the same train of investigation; and I have the pleasure to find that many of my results, of the correctness of which I was somewhat doubtful, were confirmed by his authority. With respect to the point in question, the effect of strong agitation on the blood, I believe that this process merely breaks down the coagulum, and divides the fibrin into fragments, which, from their minuteness, and the small proportion in which they exist, had previously escaped detection. Although I have found it extremely difficult to come to any precise result respecting the specific object which I had in view, yet I am strongly inclined to believe, that the proportion of fibrin is greater than ordinary in blood which exhibits the buffy coat. There is, however, in this case, a circumstance to be guarded against, which may perhaps account for this apparent increase in quantity,—that in inflamed blood the serum seems, from some cause, either mechanical or chemical, to adhere more strongly to the fibrin; and as there is no method of separating the two substances, with which I am acquainted, except ablution, friction, compression, or some similar operation, we have no means of ascertaining with certainty when the separation is complete.

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* V. I. p. 436, 437.

I have thought it desirable to transmit my observations to you, although in this very imperfect state, both because I am anxious to lose no time in correcting the error into which I had fallen, and because I wish still farther to direct the attention of chemists to the constitution of the blood, both in its healthy and in its morbid condition. It is a subject on which our information is very imperfect, so that many of the generally received opinions respecting it will probably be found to be incorrect, and have certainly been adopted upon insufficient grounds. I am, &c.

Ed. Med. and Surg. Journ.

IV.

CASE OF RUPTURE OF THE PULMONARY ARTERY.

By Mr. WILLIAM GUNN, Assistant Surgeon, Royal Navy.

JOHN WHITE, seaman, aged 46, was put upon the sick list this morning, complaining of pain in the head, principally on the right side, extending down the neck and arm to the hand, which was benumbed. He says he has been unwell for some time; that he has been restless at night, and not by any means so able for his duty as formerly. He has a slight cold, which commenced a few days ago; but he feels no pain in the chest, either on coughing or making a full inspiration. His bowels are rather inclined to constipation. He says that he feels little appetite for food; and some of his messmates have since informed me that, for some considerable time past, they have observed him eat very little, and that with no apparent relish. They have also been forcibly struck with the marked difference in his health and strength of late, yet he never made any particular complaint; and in answer to their inquiries regarding his health, he would state that "he felt unwell, yet could not say what was the matter with him." His pulse is weak, but quite regular; tongue dry, and a little furred; countenance sallow, and expressive of anxiety. There is also a particular vacancy observed about the eyes, which appear to have lost all their animation. A dose of salts was ordered to be taken immediately, and a diaphoretic at bed time. The right arm and hand to be well rubbed with volatile liniment.

In two days afterwards, the purgative and diaphoretic were again repeated, which relieved all the symptoms.

June 6th.—He appeared this morning at the visit, when he said that he felt much better, and wished to go to his duty. He was accordingly discharged from the sick list.

In the afternoon he was carried

into the sick birth in a state of insensibility: his body was covered with a clammy perspiration, and his extremities were cold. There was no pulse to be felt at the wrist or temple, and on applying the hand to the chest, the heart's action could not be perceived. Respiration was very hurried and irregular; the mouth was widely open, and surrounded with foam: and the lips were livid. By degrees, the respiration became more hurried and faint, and he continued to gasp for a few minutes, when he expired.

I learned from those who had brought him into the sick birth, that he had been engaged in some duty, which required considerable exertion, on the bowsprit, and that, without complaining of feeling ill, he was heard to utter a groan, and seen to fall backwards, and if those who were near him had not taken hold of him, he must have fallen into the water; they then carried him into the birth in the state mentioned. He had not spoken any before I had seen him, nor did he afterwards.

Dissection.—About ten hours after death, the body was examined by our excellent surgeon Mr. John Bell, my friend Mr. J. Wallace, and myself. As the cause of his death was supposed to exist in the chest, our attention was directed there, and on removing the sternum, the left side of the thorax was found to be completely filled with blood, more or less coagulated, and the lung was collapsed from the pressure of that fluid. On removing the clotted blood from the cavity of the thorax, we discovered a rupture in the pulmonary artery, about an inch and a half from its origin in the right ventricle, large enough to admit the point of the little finger. A piece of the vessel, about two inches in length, was then detached from its connections. Upon slitting up the side of the vessel, opposite to that on which the rupture had taken place, we perceived that there was a circular spot of the artery, nearly the size of a shilling, much diseased, and that the rupture was situated exactly in the centre of this diseased portion. The muscular and internal coats of the vessel were completely destroyed, and nothing remained but the external tunic, which was thin, and of a brown dusky appearance, clearly showing that it was diseased in structure.

There was no line of elevation or distinction to be observed upon the internal surface of the vessel, to mark the exact spot where the destruction of the internal and middle coats had ceased to extend; but, by holding this portion of the vessel up to a lighted candle, the disease was distinctly seen to be of the extent and appearance stated above.

The piece of ruptured vessel was of an angular form, having its base still attached, so that when laid down in its natural situation, it covered the opening as a valve.

As the cause of his death was so distinctly seen in the thorax, we considered it unnecessary to examine any of the other cavities.

Remarks.—Although there was destruction of the internal and middle coats of the artery, yet it does not appear that this was a case of aneurism, for there was no dilatation of the vessel, no sac formed, nor any coagulated blood deposited.

This disease of the vessel must have existed for some time; and when we consider how thin and transparent the external coat was, it is surprising that the rupture did not take place sooner; yet this tunic possesses considerable strength, and, from the manner in which its fibres are mixed, it is rendered so firm that even after the destruction of the two inner coats, it remains a sufficient obstacle to prevent the blood from escaping, in the same manner as the peritoneal covering of the intestinal canal presents a powerful barrier to the escape of fecal matters, even when the mucous and muscular coats of the intestines are completely destroyed.

Though the external coat was found to be so thin at death, yet it is probable that this melancholy event would not have happened so soon, if the man had not been exposed to some violent exertion.

His sallow countenance and dejected appearance might, perhaps, on his first application, have led us to suppose that some organic disease existed; yet this emaciation did not appear to be more than might be expected to be met with in a man at his time of life, especially in a sailor, whose habits most likely were intemperate and irregular. The heart was found quite healthy; and this may account for the regularity of the pulse.—*Ib.*

V.

SCIRRHUS OF THE PYLORUS, AND ULCERATION OF THE STOMACH.

Mr. Waldron, of Bath, has related an interesting case of this melancholy disease, in the last number of our Midland contemporary, which deserves notice on account of one or two curious circumstances connected with it.

The patient was a Mr. Anthony, æt. 50, commercial traveller of Bath, addicted to drinking spirits, who applied to Mr. Waldron on the 2d of December, 1828, with much debility, loss of appetite, uneasiness at the pit of the stomach, and frequent vomiting. The face was sunk and sallow, the pulse extremely weak, and the bowels very irregular. Till within the preceding eight months, he had enjoyed an uninterrupted state of good health. No fulness nor tenderness was detected on examining the abdomen, and some purgative medicines were prescribed. These, however, failing to effect any benefit, Mr. Waldron inquired further, and discovered that the sickness generally occurred from an hour and a half to three hours after eating, and that the matters brought up were dark colored, grumous, and more than commonly offensive: the evacuations were imperfect and scanty, and for some length of time a copious and sound stool had not been voided. Calomel and hemlock, leeches, and saline aperients, were now prescribed, but without any benefit; and on the 8th of January, being informed that some difficulty was experienced in administering the enema, Mr. Waldron examined the rectum himself, and by means of the stomach pump, found that some obstruction did exist, though a quantity of hardened feces was brought away. Shortly after this, a small bougie was introduced with some difficulty, when the patient expressed himself *greatly* *relieved, and the sickness of the stomach quite subsided.* The bougie was gradually augmented in size, and a pill of three grains of calomel, with eight of the pil. rhei. comp., prescribed with surprising, though transient good effect. The patient began to sink, became furiously insane, and died on the 10th of February,—the sickness never having returned since the use of the bougie.

Sectio Cadaveris, forty-eight hours after death.—"I examined the body in the presence of Mr. G. Goldstone, Surgeon, of this city. Considerable emaciation had taken place in the muscles of the extremities. On cutting through the parietes of the abdomen, an unusual depth of adipose matter was found. In the abdomen, the vessels of the small intestines appeared dark, and congested with blood. I passed a ligature in two points above the cardiac extremity of the stomach, and having divided the part between the ligatures, was proceeding to trace the stomach downwards to its pyloric extremity, when it broke, and extravasated its contents into the abdomen. I next separated the small and large intestines, following them downwards throughout their whole course. Upon laying open the stomach, the cardiac extremity appeared enlarged and thickened, and the pyloric was a complete mass of disease: at that part where a conoidal opening is formed by the termination of the stomach projecting into the duodenum, an enlargement of the size of a large duck egg was found; the stomach above this enlargement was ulcerated and thickened, and appeared as a pulpy mass; at the enlargement, the calibre of the part appeared to be nearly obliterated, and below it, the duodenum was ulcerated and thickened for several inches, and exhibited the same appearance of pulpiness, and was so fragile as to break on the slightest force being used. On cutting through the enlargement at the pyloric extremity of the stomach, the centre exhibited a scirrhous hardness; in one part there was a dark discoloration, similar to what is seen in scirrhous enlargement of the breast, prior to its passing into the ulcerative stage; on cutting into it, a dark-colored sanies escaped, which was imbedded in a tubercular cyst. The rest of the viscera of the abdomen exhibited no morbid appearance, excepting the colon and rectum, which were in several places so much contracted, as to reduce the calibre of the intestinal tube to the size of the smallest rectum bougie. In the sigmoid flexure of the colon, these contractions were very apparent, and the feces were with considerable difficulty made to pass these points, by pressing the finger and thumb above, and propelling the feces forward.

"When the colon and rectum were laid open, beginning above the left iliac region, the intestine appeared, in many parts, thickened and contracted; in other respects no morbid appearance was observed. In the head, the vessels of the brain appeared dark and congested with blood; the tunica arachnoides was very much thickened, and had become dense and obscure; in different parts, especially on one side, deposits of coagulable lymph were observed; a larger quantity of fluid than what is common, was found in the ventricles; in other respects, the brain exhibited no morbid appearances."

As Mr. Waldron justly observes, the marked relief from the passage of the bougie, and cessation of the sickness, are remarkable, and prove the intimate though mysterious consent and sympathy between the different portions of the alimentary canal. The absence of pain on pressure, though uncommon, is occasionally met with, and no necessity exists for admitting the hypothesis advanced to account for the circumstance by the author,—viz., the quantity of fat in the abdominal parietes. We have seen the same absence of pain on pressure, where no such condition obtained. —*Med. Chir. Review.*

SKETCHES OF PERIODICAL LITERATURE.

CHLORIDES OF LIME AND SODA.

We took occasion, not long since, to introduce these articles to the notice of our readers, as very powerful and useful agents in purifying the vitiated air of apartments and other places, which, by the presence of animal decomposition, had been rendered offensive or dangerous. A more ample description of their uses than we have seen, is contained in the Philadelphia Journal of Pharmacy. It is preceded by directions for the preparation of both articles, which, as they do not admit of abridgement, we give unaltered.

"The Chloride of Lime is prepared on a large scale, by introducing chlorine gas into a chamber, constructed in a suitable manner, and furnished with wooden shelves, upon which thin strata of recently slaked lime are exposed. This chamber is provided with two opposite windows, by means of which the operator can ascertain whether the vapors of chlorine are absorbed by the hydrate of lime. A door is contrived in one of the sides, in order to remove the chloride when prepared. Opposite to this door is an opening, through which the chlorine is introduced into the chamber. The roof is provided with a hydraulic valve, to open a passage to the gas, in case of too great a dilatation.

"Another process was employed in 1816, at Jouy, which consisted in introducing some hydrated lime into a cylinder, furnished with rays of narrow and thin pieces of wood, and revolving upon a hollow axis, through which the chlorine passes. By the rotating motion given to the cylinder, the combination of the gas with the hydrate of lime is greatly facilitated. When the saturation is accomplished, the chloride is removed, and preserved in well closed bottles.

"Labarraque's process consists in filling up large stone pots of an elongated form, with a mixture of twenty parts of slaked lime, and one part of muriate of soda, and introducing, gradually, chlorine gas into them. The operation is continued until the lime is sufficiently impregnated with chlorine; and this point may easily be ascertained by the appearance of the mixture becoming moist. This circumstance is a sure indication that the operation is drawing near its end.

"This compound may also be obtained by introducing slaked lime into a leaden cylinder, furnished with two bungs, one of which is provided with a tube intended for conveying the pure and washed chlorine into the cylinder, and the other with a second tube, bent at a right angle, with its inferior part plunged into a vessel containing milk of lime. The latter tube is intended to open a passage to such portions of chlorine as would have escaped combination, and would otherwise be lost, and annoy the operator.

"Solution of Chloride of Lime is prepared in the following manner:—Rub in a mortar a quantity of chloride of lime; add to it a small quantity of water, which increase gradually, so as to form a liquid mixture; let the liquor rest; decant, and pour more water on the residuum; unite these solutions of different degrees of concentration, and bottle them up securely.

"These solutions, as may be perceived, contain very different proportions of chloride. When this liquor is intended for disinfecting, it may be saturated. The quantity of dry chloride contained in Chevalier's formula affords thirty-two hundredths of chlorine gas, acting as a disinfecting agent by decomposing the miasmata evolved from the disorganization of animal and vegetable matters.

"The liquid Chloride of Soda may be obtained easily, cheaply, and of an uniform strength, by decomposing the chloride of lime by the subcarbonate of soda, as has been proposed by Mr. Payen.

"*Payen's Process.*—This method, extremely simple, has been employed in the preparation of a liquid chloride, which has obtained, in therapeutical exhibitions, all the good results it was expected to afford. It consists in mixing one part of dry chloride of lime with twelve parts of water, letting the liquor settle during three hours in close vessels, filtering, and washing the dregs in two parts more of water. On the other hand, dissolve, with a gentle heat, two parts of crystals of subcarbonate of soda in four parts of water, and let the solution cool. Then mix the two solutions together, taking care to stir the mixture well. A copious precipitate of carbonate of lime takes place, and the liquor, after settling, is decanted or filtered, and bottled up securely. This liquor is the pure chloride of soda. The precipitate may be washed with water, if desired, and a weaker solution obtained, which may be employed to dissolve a new quantity of chloride of lime for a second operation."

The uses of the chlorides are by no means confined to the mere disinfection of unhealthy apartments. In the arts they are employed for bleaching feculas, threads, linen, paper, and even for the restoration of books soiled by smoke or stains. The solution employed for this purpose contains one part of the chloride to twenty of water, in which the body is immersed until it has acquired the requisite degree of whiteness; after which it is washed with repeated portions of fresh water, in order to remove any of the chloride which might still adhere to it.

The germination of seeds is said to be rendered more active by soaking them, before sowing, in a mixture of one part of the chloride to nineteen of water. Feeble vegetables have their power of vegetating increased by watering them with a solution containing one sixty-fourth of the chloride.

The chlorides are found to aid in the preservation of alimentary substances. Eggs are preserved by being put into a solution of one part of chloride of lime to thirty-two parts of water, their relative position being occasionally changed. Vegetables and meat, which have acquired a disagreeable smell and taste, are immersed several times in water containing from a fortieth to a sixtieth of chloride of soda, and then washed in pure water. By this process, their offensive qualities are wholly removed.

These compounds are capable of disinfecting all kinds of wearing apparel and goods infected with pestilence. By applying the solutions to their persons and clothes, physicians and others have been enabled safely to visit hospitals, touch the sick, dissect the dead, and "even to dress themselves, with impunity, with the shirts and wearing apparel of people who have died with the plague. In this last instance, they had previously immersed these clothes for sixteen hours in a solution of chloride of soda, and kept them on for eighteen hours, laying all the time in their beds. Although the clothes had been impregnated with perspiration, blood, and pestilential matter, and were still stained with them, not a single one of these physicians had been in the least affected with disease twenty-two days after this daring experiment was performed."

The employment of these singular agents in the practice of medicine has already been made known to the profession. We lately noticed a case of cancerous ulceration in which this practice had been adopted with success; and they have been also used in cutaneous affections, as in scabies, and some varieties of porrigo. In these cases, the solution is first made with about a fortieth part of the chloride, and gradually increased in strength as the sensibility of the parts diminished. The lotions are repeated from four to six times a day.

NEW OPERATION FOR ANEURISM.

We learn, from late journals, that the operation of tying the artery beyond the aneurismal tumor has been again performed in the Island of Mauritius, by Mr. Montgomery, R. N., in charge of the Civil Government Hospital at that place. As the case is in many respects remarkable, we shall lay before our readers its most interesting details.

The patient was a free black, forty years of age. The tumor was situated on the left side of the neck, immediately above the sternal extremity of the clavicle, of the size of a pullet's egg, and appearing to extend downwards behind that bone. In this situation, it was evidently impossible to tie the common carotid below the aneurism. There was severe dyspnœa, with cough, and frothy expectoration.

This was the state of things on the 20th of February, when the patient applied. He was put under medical treatment till the 9th of March following, when the tumor had increased to a most alarming size, its base occupying two thirds of the clavicle, and extending nearly four inches upwards toward the angle of the jaw. Under these circumstances, it was determined to perform the operation which afforded the only chance of relief. An incision was accordingly made through the fibres of the platysma myoid muscle, and the dissection continued on the inner side of the sterno mastoid muscle, so as to expose the sheath of the artery close to its bifurcation. This was then slit open, the vessel separated from the vein and nerve by which it was accompanied, and enclosed in a ligature. Several embarrassments occurred during the operation, and the space through which the vessel could be exposed was very small, on account of the situation of the veins. None of the veins, however, were divided, and the whole hemorrhage did not exceed a teaspoonful.

The patient was considerably relieved by the operation, in regard to many of the symptoms. The cough and dyspnœa diminished, and his situation was rendered generally more comfortable. The pulsation in the tumor diminished, and at times was wholly absent. Its size, however, gradually increased; and its parietes evidently grew more thin, threatening an approaching rupture. In the mean time, an abscess formed in the course of the cicatrix, which broke, and the wound entirely healed. At length, on the 28th of May, nearly three months from the time of the operation, the tumor burst, and discharged about eight ounces of fetid chocolate-colored fluid. As no hemorrhage followed this, and the natural opening seemed insufficient for the escape of this matter, it was enlarged with a lancet, and gave exit to six ounces more of similar fluid. On examining the cavity, the artery was found without pulsation below the place of the ligature. The wound was dressed with lint, and assumed a healthy appearance. At the time of the report, June 8th, it seemed on the eve of healing. The patient was recovering his general health, and seemed likely to do well.

BOSTON, TUESDAY, JANUARY 19, 1830.

ANNUAL REPORT OF THE BOSTON EYE AND EAR INFIRMARY.

By the fifth report of the Surgeons to this charity, it appears that its benefits have been more extensively sought than in previous years, and that it is regarded not as an experiment, but as an established Institution, the advantages of which are generally acknowledged, and need not enumeration or evidence. The number and success of the cases treated are thus set forth in the report:—

"Since the last annual meeting, six hundred and ninety-nine patients have applied at the Infirmary. Of this number, 594 with diseases of the Eyes, and 105 with diseases of the Ears. Of this number, 439 diseases of the Eyes have been cured, —28 relieved,—20 not treated,—16 were incurable,—and 41 cases are still under treatment. A great proportion of the cases not treated were cataracts. Some were not sufficiently advanced for the operation; and some were not able to defray the necessary expense of board, and left the Infirmary without treatment."

"Of the diseases of the Ear, 48 cases have been cured,—22 relieved, —25 were incurable, and not treated,—and 10 remain under treatment."

Respecting the diseases of the eye, the Surgeons add :—

"Almost every case which is marked incurable, had been rendered so, long since, by mal-treatment or neglect, and no treatment afforded any chance of relief. It is a melancholy truth, that all of them were originally cases such as daily appear at the Infirmary, and receive certain and speedy relief."

To the opinion contained in this paragraph we cannot yield an assent, without further proof than is yet before the public; and we regret that the officers of so useful and important a charity should think it necessary to express such a sentiment. That the extensive experience in ophthalmic disease acquired at such an institution is the parent of skill, and the means of relieving much suffering, cannot be doubted; but we do not believe that the well-educated members of the profession, in this country, are so grossly ignorant of a branch of practice which every one of them has considered as much within the sphere of his professional duty as that of midwifery,—we cannot believe them so ignorant of the diseases of the eye, as to justify the assertion that "almost every case which is marked incurable, had been rendered so, long since, by maltreatment or neglect." It is possible the reporters do not intend to say that the mal-treatment was by any regular practitioner;—we hope this may be the case; but if so, the sentence should not have been without qualification: for it is no light affair to drop into the families of our citizens an official intimation that such a measure of incurable disease, in an organ the healthy functions of which are so important to our comfort and happiness, has been caused by the gross ignorance of the faculty in a branch of practice in which they are, in truth, very generally well versed, and practically skilful.

The Diseases treated at the Infirmary the past year have been as follows :—

Diseases of the Eye.

Acute Ophthalmia	83
Chronic Ophthalmia	38
Pustular Ophthalmia	22
Erysipelatous Ophthalmia	4
Purulent Ophthalmia	5
Puriform Ophthalmia	2
Rheumatic Ophthalmia	1
Ophthalmia with Ulcers of Cornea	36
Vascular Cornea and Granular Lids	13
Opacity of Cornea	10
Ptyrigium	1
Ectropeon	5
Entropeon	1
Nyctalopia	1
Ecchymosis Conjunctivæ	7
Staphyloma	4
Iritis	5
Cataract Adults	20
Cataract Infants	4
Amaurosis	10
Fungous Conjunctiva	1
Closure of Pupil	4
Ptosis	1
Tinea Ciliaris	83
Lippitudo	102
Tumors of Lid	10
Hordeolum	8
Abscess of Lid	2
Hypopion	2
Diseases of Lachrymal Passage	29
Wounds and other Injuries of Eyes	19
Weakness of Sight	9
Morbid Sensibility of Retina	33
Choroiditis	1
Inflammation of Cornea	1
Warts of Eyelid	2

Tumors of Conjunctiva	4
Myopia	1
Pustular Lid	5
Strabismus	4
Deficiency of Pigmentum Nig	1
	594

Diseases of the Ear.

Otorrhœa	22
Obstructio Conchæ	17
Abscess of Concha	15
Nervous Deafness	25
Polypus of Concha	1
Otitis	20
Herpetic Eruption Concha	3
Obstruction of Eustachian Tube	1
Abscess of Mastoid Cells	1
	105

CAOUTCHOUC.

Dr. J. K. Mitchell, Professor of Chemistry in the Philadelphia Medical Institute, has discovered a mode of making sheet-caoutchouc, possessed of very remarkable qualities. It is eminently soft and pleasant to the touch, possesses very great extensibility, without the exertion of much force, and may be made so thin as to appear colorless and transparent, yet retaining considerable strength and tenacity. When a sheet is folded and cut, or when two pieces are laid together and cut with scissors, the cut edges adhere with considerable force, and indeed, after some hours maceration, adhere as strongly as the rest of the sheet. In that way, tubes, bags, socks, caps, luting joints &c. water and air tight, may be made. Its impenetrability and softness render it applicable to the treatment of many local diseases, especially chronic rheumatism.

Its properties and uses are so very similar to those of the sheet-caoutchouc made by Mr. Hancock, of London, that the identity of them is highly probable. Mr. Hancock conceals his process; but Dr. Mitchell, more liberal, and confident that his discovery may be eminently useful to the whole world, has not hesitated a moment to divulge it, and has authorized me to publish in this Journal the experiments he has made in my presence, and which I have repeated with the same success. Dr. Mitchell forms his preparation by soaking the caoutchouc in ether until soft. In that state it may be cut into plates or sheets, with a wetted knife, without difficulty, or the sheets may be stretched to a great extent. If caoutchouc *bags*, so softened, be inflated through a stopcock by the breath, they are often expanded to a great size. One, now in Peale's museum, which weighs only seven ounces, measures six feet and some inches in circumference. The inflated caoutchouc does not, when liberated from pressure, contract much.

Dr. Mitchell has also discovered a very good solvent for caoutchouc. It is the essential oil of sassafras, acting on the article after it has been softened by ether. This solution will, when dry, and it dries in a day or two, present a thin pellicle of pure caoutchouc, which can, by wetting it with water, be separated in a sheet from glass and porcelain. Applied to the surfaces of torn or cut caoutchouc, it causes their firm and inseparable adhesion. Silk treated with it remains *apparently* unchanged, but becomes water tight.

Note.—When very thin caoutchouc, prepared as above, is applied over the mouth of a glass jar, it adheres without the existence of any ligature, and permits, through its transparency, the inspection of the contents of the jar. As it is attacked by no insects, and cannot be gnawed by vermin, its protecting influence greatly exceeds that of anything but glass itself. It has also the convenient quality of durability, the same pieces being susceptible of repeated applications, because very few chemical agents act on them.—*Phil. Journ. of Pharm.*

Artificial Preparation of Ice.—After numerous trials made by M. B. Meylink with different salts, for the purpose of converting water contained in a tin vessel into ice during their solution, he ultimately gave the preference to a mixture of four ounces nitrate of ammonia, four ounces subcarbonate of soda, and four ounces of water. This mixture in three hours produced ten ounces of ice; whilst with the mixture of sulphate of soda and muriatic acid, he obtained ice only after seven hours.—*Phil. Journ. of Pharmacy.*

Pharmacopœia.—A medical convention is to be held at NewYork, on the first Wednesday of June, to alter and enlarge the Pharmacopœia, so as to conform to the improved state of science and practice.

A new Remedy for Intemperance.—The Glasgow police have lately adopted the plan of shaving the heads of topers, when found in a senseless state. Nothing could exceed the astonishment and horror of a man who was operated upon on Saturday night, when he put his hand on his head in the morning, and found it shorn. Let it be established by law, that every drunkard taken up by the watch shall have his head shaved, and we should at once see a great run of business to wig makers, or a very great diminution of those disgusting spectacles, with which our streets are now defiled.—*People's Friend & Gaz.*

Physicians in Jerusalem.—In the laws of Jerusalem, according to Godfrey, of Bouillon, it is provided that "if any physician should fail to cure a slave, he shall be condemned to pay for the said slave, or to substitute another in his place: if a Christian die under his hands, his goods shall be confiscated, and he shall be hanged, having been first whipped, and conducted to the gallows with a urinal in his hand as a warning to others.—*N.Y. Med. Inquirer.*

Tic Douloureux.—The nitrate of silver has been recommended in this disease, by Mr. Abernethy and others, in the dose of one grain twice a day.

Bituminous Coal.—We understand a mine of this coal has been discovered in Clearfield Co., Penn., within twenty-five miles of canal navigation. It burns equally well with the best Liverpool coal. The great resources of our country, in different species of coal, are gradually being developed, and must eventually be a source of considerable revenue.

Boylston Prize.—The Prize offered by the Boylston Medical Society of Harvard University, for the best Dissertation "*De Paruna*," has been awarded to Mr. AUGUSTUS A. GOULD, of this city.

WEEKLY REPORT OF DEATHS IN BOSTON, ENDING JANUARY 9.

Date.	Sex.	Age	Disease.
Dec. 28.	F.	82 yrs	old age
Jan. 2.	M.	2 mo	inflammation in the lungs
	M.	43 yrs	do. do.
	F	2	do. of the bowels
	M.	8	enlargement of the heart
	F.	7	consumption
3.	M	44	do.
	M.	10 mo	chickenpox
	M.	34 yrs	unknown
	M.	70	gravel
4.	F.	39	unknown
	M.	5 yrs	dropsy in the head
	F.	66	consumption
	M.	7 h	unknown
	F.	38 yrs	consumption
5.	F.	36	do.
6.	M.	45	lung fever
	M.	32	consumption
7.	F.	11 mo	dropsy in the head
8.	F.	24 yrs	consumption
	F.	3	do.
9.	F.	23	liver complaint

Males, 11,—Females, 11. Total, 22.

ADVERTISEMENTS.

NEW MEDICAL BOOKS.

JUST published, and for sale, by CARTER & HENDEE,—Malaria; an Essay on the Production and Propagation of this Poison. By **John McCulloch**, M.D. F.R.S., &c. &c.

An Essay on the Diseases of the Internal Ear. By I. A. **Saissy**, M.D. Translated from the French, by **Nathan R. Smith**, M.D., Professor of Surgery in the University of Maryland; with a Supplement on Diseases of the External Ear, by the Translator.

Observations on the Utility and Administration of Purgative Medicines, in several Diseases. By **James Hamilton**, M. D., Fellow of the Royal College of Physicians, &c. &c. From the Fifth Edinburgh Edition.

A Treatise on Pathological Anatomy. By **William E. Horner**, M.D., Adjunct Professor of Anatomy in the University of Pennsylvania, Surgeon at the Infirmary of the Philadelphia Almshouse, Member of the American Philosophical Society, &c.

Elements of Operative Surgery. Translated from the French of A. **Tavernier**, Doctor of Medicine of the Faculty of Paris, &c., with copious Notes and Additions. By S. D. **Gross**, M.D.

A Treatise on the Nature, Cause and Treatment of Contagious Typhus. From the German of J. **Val De Hildenbrand**, Imperial and Royal Counsellor, Professor of the Practice of Medicine in the University of Vienna, &c. &c. By S. D. **Gross**, M.D.

An Essay on the Morbid Sensibility of the Stomach and Bowels. By **James Johnson**, M.D.

Examinations in Anatomy, Physiology, Practice of Physic, Surgery, Chemistry, Materia Medica, and Pharmacy. For the Use of Students. By **Robert Hooper**, M.D. Dec. 22.

MEDICAL SCHOOL OF MAINE.

THE MEDICAL LECTURES at BOWDOIN COLLEGE will commence on TUESDAY, February 23, 1830.

Theory and Practice of Physic, by **John Delamatter**, M.D.
Anatomy and Surgery, by J. D. **Wells**, M.D.
Midwifery, by **James McKeen**, M.D.
Chemistry and Materia Medica, by P. **Cleaveland**, M.D.

The **Anatomical Cabinet** is extensive, and very valuable.

The **Library**, already one of the best Medical Libraries in the United States, continues to be every year enriched by New Works, both foreign and domestic.

Every person becoming a member of this Institution, is required to present satisfactory evidence that he possesses a good moral character.

The amount of fees for admission to all the Lectures is $ 50. Graduating fee, including diploma, $ 10. There is no matriculating fee. The Lectures continue three months.

Degrees are conferred at the close of the Lecture term in May, and at the following Commencement of the College in September. A systematic course of instruction, embracing Recitations in all the branches of Medical Science, Demonstrations, and Lectures, will be given by the Professors, during the interval between the annual courses of Lectures.

Boarding may be obtained in the Commons Hall at a very reasonable price.

Brunswick, Dec. 4, 1829.

MORBID ANATOMY.

CARTER & HENDEE have just received,—The Morbid Anatomy of the Stomach, Bowels and Liver; illustrated by a Series of Plates from Drawings after Nature, with explanatory letter press, and a Summary of the Symptoms of the Acute and Chronic Affections of the above-named Organs. By **John Armstrong**, M.D.

The above work will be completed in six numbers, at $ 6,00 each. Three numbers are already published. Sub scriptions received by C. & H.

Oct. 6. 2am3m

MEMOIR OF DR. HOLYOKE.

JUST published, and for sale by CARTER & HENDEE,—A Memoir of **Edward A. Holyoke**, M.D. LL.D., prepared in compliance with a vote of the Essex South District Medical Society.

A TREATISE on the Scrofulous Disease, by C. G. **Hufeland**, Physician to the King of Prussia, &c., translated from the French of M. Bousquet, by Charles D. Meigs, M.D., is just received and for sale by CARTER & HENDEE.

Sept. 8.

Published weekly, by **John Cotton**, at 184, Washington St. corner of Franklin St., to whom all communications must be addressed, *postpaid*.—Price three dollars per annum, if paid in advance, three dollars and a half if not paid within three months, and four dollars if not paid within the year. The postage for this is the same as for other newspapers.